	Application No.	Applicant(s)
Notice of Allowability	09/888,166	LIN ET AL.
	Examiner	**Art Unit**	
	Merilyn P. Nguyen	2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to _09/05/2007_.

2. ☒ The allowed claim(s) is/are _1-6,8-19 and 21-26 and now renumbered as 1-24_.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None of the:

       1. ☐ Certified copies of the priority documents have been received.

       2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

       3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the

          International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____ .

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

       1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____ .

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of

       Paper No./Mail Date _____ .

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____ .

WILSON LEE
PRIMARY EXAMINER

DETAILED ACTION

1.   In response to the communication dated 09/05/2007 and the Interview dated 11/09/2007,

claims 1-6, 8-19, and 21-26 are active in this application as a result of the cancellation of claims

7, 20 and 27 and in condition for allowance.

Examiner's Amendment

2.   An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR

1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the

payment of the issue fee.

        Authorization for this examiner's amendment was given in a telephone interview with

Mr. Dave R. Hofman, Reg. No. 55,272 on 11/09/2007.

The application has been amended as follows:

1.   (Currently amended) A computer-based method of data replication in a

programmable computer system comprising the steps of:

        polling a transaction log file of ~~created by~~ a non-relational database of a proprietary

system at a time interval for file transactions of the non-relational database by at least one data

replication server not running the non-relational database;

responsive to detecting file transactions of the non-relational database, reading the file

transactions from the transaction log file of ~~created by~~ the non-relational database by the at

least one data replication server;

determining if the file transactions read from the transaction log file of ~~created by~~ the

non-relational database indicate a change in the non-relational database based on a record type of

the file transactions, wherein the record type is one of a delete, ~~put~~ <u>insert</u>, and update record; and

if the file transactions read from the transaction log file of ~~created by~~ the non-relational

database indicate a change in the non-relational database, sending the file transactions from the

at least one data replication server to at least one relational database, wherein the file transactions

of the non-relational database sent to the at least one relational database are accessible in real

time and wherein the at least one relational database is updated by more than one data replication

server at a time.

6.   (Currently amended) The computer-based method of claim 4, wherein the

determining step comprises:

determining from the configure file if each of the file transactions is to be at least one of

delete, ~~put~~ <u>insert</u>, and updated in the at least one relational database.

14.   (Currently Amended) A data processing computer-based system for data replication

in a sub-system; the data processing computer-based system comprising:

polling means for polling a transaction log file of ~~created by~~ a non-relational database

of a proprietary system at a time interval for file transactions of the non-relational database by at

least one data replication server not running the non-relational database;

responsive to detecting file transactions of the non-relational database, reading means for

reading the file transactions from the transaction log file of ~~created by~~ the non-relational

database by the at least one data replication server;

determining means for determining if the file transactions read from the transaction log

file of ~~created by~~ the non-relational database indicate a change in the non-relational database

based on a record type of the file transactions, wherein the record type is one of a delete, ~~put~~

insert, and update record; and

if the file transactions read from the transaction log file of ~~created by~~ the non-relational

database indicate a change in the non-relational database, sending means for sending the file

transactions from the at least one data replication server to at least one relational database

through at least one respective communication link, wherein the file transactions of the non-

relational database sent to the at least one relational database are accessible in real time~ and

wherein the at least one relational database is updated by more than one data replication server at

a time.

19.   (Previously Presented) The computer-based system of claim 18, wherein the

determining means comprises:

retrieving means for retrieving a next transaction record;

determining means for determining if a record type of the next transaction record is one

of a delete, ~~put~~ insert, and update; and

determining means for determining from the configure file if the next transaction record

is to be at least one of deleted, put, and updated in the at least one relational database.

Reason for Allowance

3.   The following is an examiner's statement of reason for allowance:

None of the references of record Martin (US Patent No. 6,029,178), and Draper (US

Patent No. 6,192,365) teaches or suggests the claimed (Claims 1 and 14) invention having, in

addition to the other limitations in the claims, the limitations of "if the file transactions read from

the transaction log file of the non-relational database indicate a change in the non-relational

database, sending the file transactions from the at least one data replication server to at least one

relational database, wherein the at least one relational database is updated by more than one data

replication server at a time."

Dependent claims 2-6, 8-13, 15-19 and 21-26 are allowable because they depend

from claims 1 and 14.

4.   Any comments considered necessary by applicant must be submitted no later than the

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for

Allowance".

Conclusion

5.   A shortened statutory period for response to this action is set to expire 3 (three) months

and 0 (zero) day from the day of this letter. Failure to respond within the period for response will

cause the application to become abandoned (see M.P.E.P 710.02(b)).

6.   The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Applewhite U.S Patent No. 6,711,575 discloses method and systems for providing

controllable access to information contained in repositories.

Goldman U.S Patent No. 6,615,405 discloses method and system for distributing and

maintaining software across a computer network.

Doug Stacy discloses, "Replication: DB2, Oracle, or Sysbase?", 1995.

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Merilyn P Nguyen whose telephone number is 571-272-4026.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Don Wong can be reached on 571-272-1834. The fax phone numbers for the

organization where this application or proceeding is assigned are 571-273-8300 for regular

communications and 703-746-7240 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-305-3900.

MN
November 09, 2007

**WILSON LEE
PRIMARY EXAMINER**